

The “Omnivorous Leafroller”, *Platynota stultana* Walsingham, 1884 (Tortricidae: Sparganothini), a new moth for Europe

FRANS GROENEN¹ & JOAQUÍN BAIXERAS²

¹ Dorpstraat 171, 5575 AG Luyksgestel, The Netherlands; groene.eyken@chello.nl

² Institut Cavanilles de Biodiversitat i Biologia Evolutiva, Universitat de València, C/ Catedràtic Jose Beltrán 2, 46022 Valencia, Spain; joaquin.baixeras@uv.es (corresponding author)

Received 2 February 2013; reviews returned 25 February 2013; accepted 6 March 2013.

Subject Editor: Jadranka Rota.

Abstract. *Platynota stultana* Walsingham, 1884, a polyphagous tortricid and economically important species, is formally recorded for the first time for Europe.

Introduction

Platynota stultana Walsingham, 1884 is an invasive species of Tortricidae native to Mexico and the southwestern United States, accidentally introduced to the Hawaiian Islands (Miller 1995). Known in the entomological literature as the “omnivorous leafroller”, its potential range of food plants includes more than 20 plant families including relevant ornamental plants, agricultural crops, and even forest species (Powell & Brown 2012).

Its presence in Europe was first detected in 2009 by pest control services of the provinces of Murcia and Almería in Spain during routine monitoring of agricultural areas, mostly on pepper crops (*Capsicum* sp., Solanaceae). Although there has been no reaction in the entomological literature, several popular electronic agricultural journals and leaflets have included information on this pest and provided details on its distribution and potential control in Spain (Hymenoptera 2011).

Parallel field work developed in Spain in the period 2005–2008 in the provinces of Almería, Alicante, and Granada by A. Cox and M. Delnoye rendered a good series of specimens of an unknown Sparganothini species that was finally identified by A. Schreurs and the first author of this paper as belonging to *P. stultana*. Because of the economic importance of the species and the limited attention that the entomological literature has paid to this new pest introduction, it seems appropriate to publish this note to formally record its presence in Spain.

Platynota stultana is a small moth, the wingspan of the male is 10–15 mm and of the female 14–19 mm. As in most members of the tribe Sparganothini, the labial palpi are long and frontally projected. This character is not found in the European fauna except in the few species of the genus *Sparganothis* Hübner, reducing potential mistakes in identification. Male forewings possess a small costal fold. The general upperside ground colour is brown in the approximately basal half and golden brown in the distal half (Fig. 1A). In the female the markings are less distinct (Fig. 1B). Some colour variation is common. Male and female genitalia include unmistakable features (Figs 1C, D).

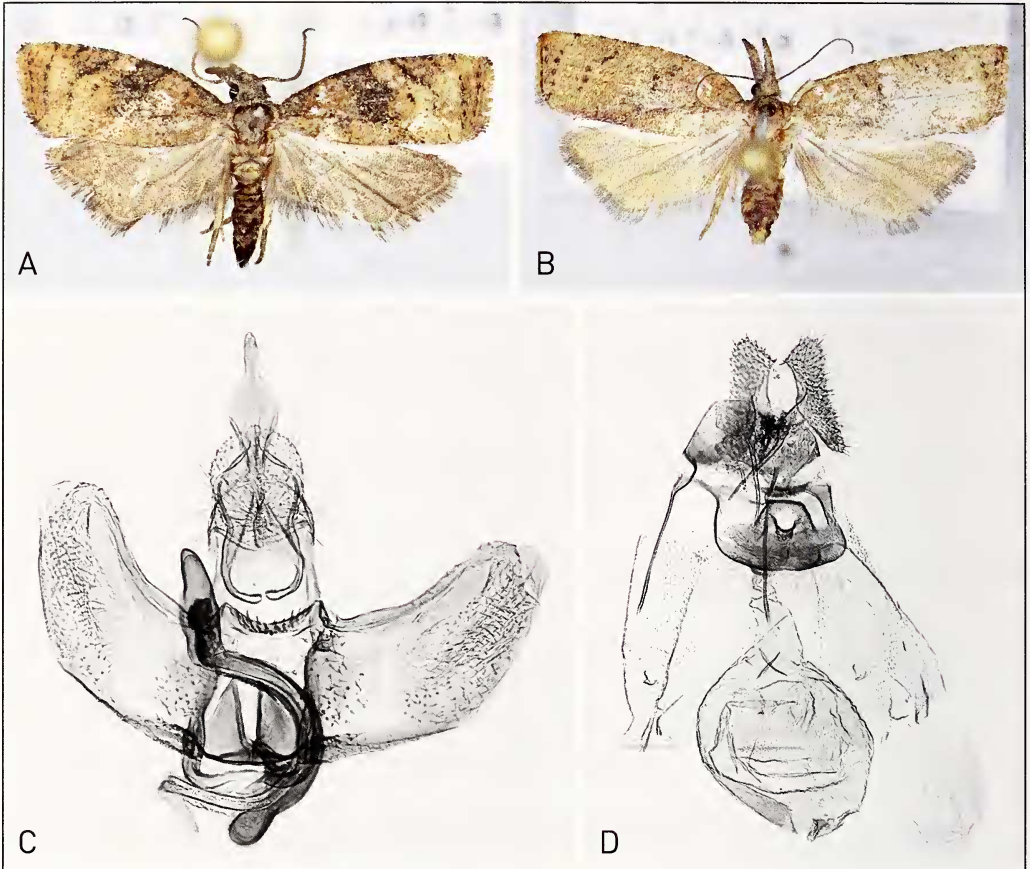


Fig. 1. *Platynota stultana*. **A:** Male (Cabo de Gata, Almería, Spain). **B:** Female (Granada, Spain). **C:** Male genitalia (GS: FG2409). **D:** Female genitalia (GS: FG2408).

Detailed information on its morphology and biology is compiled by Powell & Brown (2012).

In the United States the moth has 4–6 generations a year. The female lays a patch of about 100 eggs. After hatching the larvae move to the top of the plant and feed within a bud or between the two leaves. In greenhouse conditions the larvae are fully grown within a period of 20–30 days. They hibernate between the third and fifth instar in webbed nests. Pupation takes place in a rolled leaf.

Material. **Spain**, 29 specimens, Almeria, Aqua Dulce, x.2005, leg. AC; 3 specimens, Alicante, La Marina, leg. MD; 18 specimens, Almeria, Cabo de Gata, vi.2007; 5 specimens, same locality but dated x.2007; 82 specimens, Granada, Castillio de Banos, x.2008, genitalia slides FG2138♂, FG2354♀, FG2355♂; 10 specimens, same locality but dated vi.2010; 1 specimen, xi.2011 [GNL, AS, AC].

Abbreviations

- AS Collection A. Schreurs, Kerkrade, The Netherlands
AC Collection A. Cox, Mook, The Netherlands
GNL Collection F. Groenen, Luyksgestel, The Netherlands
MD Collection M. Delnoye, Susteren, The Netherlands

Acknowledgements

The authors want to express their gratitude to John Brown (USDA, Washington, USA), Tomas Cabello (University of Almeria, Spain), Anton Cox and Martin Delnoye (The Netherlands), Ferran García-Mari (Polytechnic University of Valencia, Spain), Arnold Schreurs (The Netherlands), Marja von der Straten (Plant Protection Service, The Netherlands), and Boyan Zlatkov (Sofia University, Bulgaria) for their collections, information, and helpful comments.

References

- Miller, S. E. 1995. *Platynota stultana*, the omnivorous leafroller, established in the Hawaiian Islands (Lepidoptera: Tortricidae). – Bishop Museum Occasional Papers 42: 36–39.
Powell, J. A. & J. W. Brown 2012. The Moths of North America. Fascicle 8.1, Tortricoidea, Tortricidae (Part), Sparganothini and Atterini. – The Wedge Entomological Research Foundation, Washington, 229 pp.
Hymenoptera 2011. *Platynota stultana*, un nuevo lepidóptero plaga en el sudeste español. – Homo agrícola, 1: 33–38.